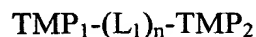
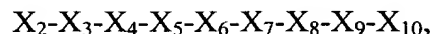


Appendix A Pending Claims

Claim 1 (original): A compound that binds to an mpl receptor comprising the structure



wherein TMP_1 and TMP_2 are each independently selected from the group of core compounds comprising the structure:



wherein,

X_2 is selected from the group consisting of Glu, Asp, Lys, and Val;

X_3 is selected from the group consisting of Gly and Ala;

X_4 is Pro;

X_5 is selected from the group consisting of Thr and Ser;

X_6 is selected from the group consisting of Leu, Ile, Val, Ala, and Phe;

X_7 is selected from the group consisting of Arg and Lys;

X_8 is selected from the group consisting of Gln, Asn, and Glu;

X_9 is selected from the group consisting of Trp, Tyr, and Phe;

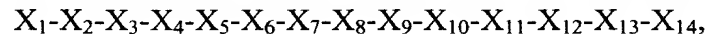
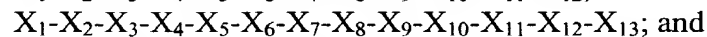
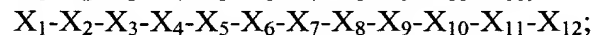
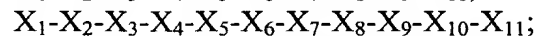
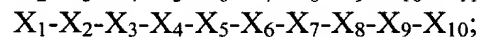
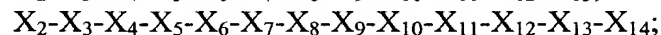
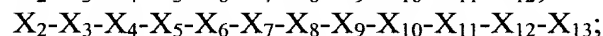
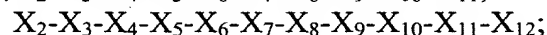
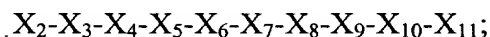
X_{10} is selected from the group consisting of Leu, Ile, Val, Ala, Phe, Met, and Lys;

L_1 is a linker; and

n is 0 or 1;

and physiologically acceptable salts thereof.

Claim 2 (original): The compound according to Claim 1 wherein said TMP_1 and TMP_2 are independently selected from the group consisting of:



wherein $\text{X}_2 - \text{X}_{10}$ are as defined;

X_1 is selected from the group consisting of Ile, Ala, Val, Leu, Ser, and Arg;

X_{11} is selected from the group consisting of Ala, Ile, Val, Leu, Phe, Ser, Thr, Lys, His, and Glu;

X_{12} is selected from the group consisting of Ala, Ile, Val, Leu, Phe, Gly, Ser, and Gln;

X₁₃ is selected from the group consisting of Arg, Lys, Thr, Val, Asn, Gln, and Gly;
and

X₁₄ is selected from the group consisting of Ala, Ile, Val, Leu, Phe, Thr, Arg, Glu, and Gly.

Claim 3 (withdrawn): The compound according to Claim 1 wherein said TMP₁ and/or TMP₂ are derivatized as set forth in one or more of the following:

one or more of the peptidyl [-C(O)NR-] linkages (bonds) have been replaced by a non-peptidyl linkage such as a -CH₂-carbamate linkage [-CH₂-OC(O)NR-]; a phosphonate linkage; a -CH₂-sulfonamide [-CH₂-S(O)₂NR-] linkage; a urea [-NHC(O)NH-] linkage; a -CH₂-secondary amine linkage; or an alkylated peptidyl linkage [-C(O)NR⁶- where R⁶ is lower alkyl];

the N-terminus is a -NRR¹ group; to a -NRC(O)R group; to a -NRC(O)OR group; to a -NRS(O)₂R group; to a -NHC(O)NHR group where R and R¹ are hydrogen and lower alkyl with the proviso that R and R¹ are not both hydrogen; to a succinimide group; to a benzyloxycarbonyl-NH- (CBZ-NH-) group; or to a benzyloxycarbonyl-NH- group having from 1 to 3 substituents on the phenyl ring selected from the group consisting of lower alkyl, lower alkoxy, chloro, and bromo;

the C terminus is -C(O)R² where R² is selected from the group consisting of lower alkoxy and -NR³R⁴ where R³ and R⁴ are independently selected from the group consisting of hydrogen and lower alkyl.

Claim 4 (withdrawn): The compound according to Claim 1 wherein all of the amino acids have a D configuration.

Claim 5 (withdrawn): The compound according to Claim 1 wherein at least one of the amino acids has a D configuration.

Claim 6 (withdrawn): The compound according to Claim 1 which is cyclic.

Claim 7 (original): The compound according to Claim 1 wherein TMP₁ and TMP₂ are each Ile-Glu-Gly-Pro-Thr-Leu-Arg-Gln-Trp-Leu-Ala-Ala-Arg-Ala. (SEQ ID NO: 1).

Claim 8 (withdrawn): The compound according to Claim 1 wherein L₁ comprises a peptide.

Claim 9 (withdrawn): The compound according to Claim 8 wherein L₁ comprises Y_n, wherein Y is a naturally-occurring amino acid or a stereoisomer thereof and n is 1 through 20.

Claim 10 (withdrawn): The compound according to Claim 8 wherein L₁ comprises (Gly)_n, wherein n is 1 through 20, and when n is greater than 1, up to half of the Gly residues may be substituted by another amino acid selected from the remaining 19 natural amino acids or a stereoisomer thereof.

(Gly)₃Lys(Gly)₄ (SEQ ID NO: 6);
(Gly)₃AsnGlySer(Gly)₂ (SEQ ID NO: 7);
(Gly)₃Cys(Gly)₄ (SEQ ID NO: 8); and
GlyProAsnGly (SEQ ID NO: 9).

Claim 13 (withdrawn): A dimer of the compound according to Claim 12.

$$\begin{array}{c} \text{TMP}_1\text{-Gly}_3\text{-Cys-Gly}_4\text{-TMP}_2 \\ | \\ \text{TMP}_1\text{-Gly}_3\text{-Cys-Gly}_4\text{-TMP}_2. \end{array}$$

Claim 16 (original) The compound according to Claim 1, which is selected from the group consisting of

IEGPTLRQCLAARA-GGGGGGGG-IEGPTLRQCLAARA (cyclic)
 (SEQ. ID NO: 11)

IEGPTLRQALAARA-GGGGGGGG-IEGPTLRQALAARA (SEQ. ID NO: 13)

IEGPTLRQWLAARA-GGGKGGGG-IEGPTLRQWLAARA (SEQ. ID NO: 14)

IEGPTLRQWLAARA-GGGK(BrAc)GGGG-IEGPTLRQWLAARA (SEQ. ID NO: 15)

IEGPTLRQWLAARA-GGGCGGGG-IEGPTLRQWLAARA (SEQ. ID NO: 16)

IEGPTLRQWLAARA-GGGK(PEG)GGGG-IEGPTLRQWLAARA (SEQ. ID NO: 17)

IEGPTLRQWLAARA-GGGC(PEG)GGGG-IEGPTLRQWLAARA

(SEQ. ID NO: 18)

IEGPTLRQWLAARA-GGGNGSGG-IEGPTLRQWLAARA

(SEQ. ID NO: 19)

IEGPTLRQWLAARA-GGGCGGGG-IEGPTLRQWLAARA

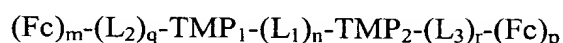
IEGPTLRQWLAARA-GGGCGGGG-IEGPTLRQWLAARA

(SEQ. ID NO: 20);

IEGPTLRQWLAARA-GGGGGGGG-IEGPTLRQWLAARA

(SEQ. ID NO: 21).

Claim 17 (withdrawn): The compound according to Claim 1 or 2, which has the formula



wherein L_1 , L_2 and L_3 are linker groups which are each independently selected from the linker groups consisting of

Y_n , wherein Y is a naturally-occurring amino acid or a stereoisomer thereof and n is 1 through 20;

$(\text{Gly})_n$, wherein n is 1 through 20, and when n is greater than 1, up to half of the Gly residues may be substituted by another amino acid selected from the remaining 19 natural amino acids or a stereoisomer thereof;

$(\text{Gly})_3\text{Lys}(\text{Gly})_4$ (SEQ ID NO: 6);

$(\text{Gly})_3\text{AsnGlySer}(\text{Gly})_2$ (SEQ ID NO: 7);

$(\text{Gly})_3\text{Cys}(\text{Gly})_4$ (SEQ ID NO: 8);

GlyProAsnGly (SEQ ID NO: 9);

a Cys residue; and

$(\text{CH}_2)_n$, wherein n is 1 through 20

Fc is an Fc region of an immunoglobulin; m, p, q and r are each independently selected from the group consisting of 0 and 1, wherein at least one of m or p is 1, and further wherein if m is 0 then q is 0, and if p is 0, then r is 0; and physiologically acceptable salts thereof.

Claim 18 (withdrawn): The compound according to Claim 17 wherein L_1 , L_2 and L_3 are each independently selected from the group consisting of Y_n , wherein Y is selected a naturally-occurring amino acid or a stereoisomer thereof and n is 1 through 20.

Claim 19 (withdrawn): The compound according to Claim 18 wherein L_1 comprises $(\text{Gly})_n$, wherein n is 1 through 20, and when n is greater than 1, up to half of the Gly residues may be

substituted by another amino acid selected from the remaining 19 natural amino acids or a stereoisomer thereof.

Claim 20 (withdrawn): The compound according to Claim 18 wherein L₁, L₂ and L₃ are independently selected from the group consisting of

(Gly)₃Lys(Gly)₄ (SEQ ID NO: 6);
(Gly)₃AsnGlySer(Gly)₂ (SEQ ID NO: 7);
(Gly)₃Cys(Gly)₄ (SEQ ID NO: 8); and
GlyProAsnGly (SEQ ID NO: 9).

Claim 21 (withdrawn): The compound according to Claim 18 wherein L₁, L₂, or L₃ comprises a Cys residue.

Claim 22 (withdrawn): A dimer of the compound according to Claim 21.

Claim 23 (withdrawn): The compound according to Claim 17 wherein L₁, L₂ or L₃ comprises (CH₂)_n, wherein n is 1 through 20.

Claim 24 (original): A compound that binds to an mpl receptor, which is selected from the group consisting of

Fc-IEGPTLRQWLAARA-GPNG-IEGPTLRQWLAARA	(SEQ. ID NO: 22)
Fc-IEGPTLRQWLAARA-GPNG-IEGPTLRQWLAARA-Fc	(SEQ. ID NO: 23)
IEGPTLRQWLAARA-GGGGGGGG-IEGPTLRQWLAARA-Fc	(SEQ. ID NO: 24)
Fc-GG-IEGPTLRQWLAARA-GPNG-IEGPTLRQWLAARA	(SEQ. ID NO: 25)
Fc-IEGPTLRQWLAARA-GGGGGGGG-IEGPTLRQWLAARA	(SEQ. ID NO: 26)
Fc-IEGPTLRQCLAARA-GGGGGGGG-IEGPTLRQCLAARA (cyclic) -----	(SEQ. ID NO: 27)
Fc-IEGPTLRQCLAARA-GGGGGGGG-IEGPTLRQCLAARA (linear)	(SEQ. ID NO: 28)
Fc-IEGPTLRQALAARA-GGGGGGGG-IEGPTLRQALAARA	(SEQ. ID NO: 29)
Fc-IEGPTLRQWLAARA-GGGKGGGG-IEGPTLRQWLAARA	(SEQ. ID NO: 30)
Fc-IEGPTLRQWLAARA-GGGCGGGG-IEGPTLRQWLAARA	(SEQ. ID NO: 31)

Claim 34 (withdrawn): A method of producing a compound according to claims 8, 13, 18 or 22, which comprises growing a host cell according to claim 33 in a suitable nutrient medium and isolating said compound from said cell or nutrient medium.

Claim 33 (withdrawn): A host cell that comprises a vector according to claim 32.

Claim 32 (withdrawn): A vector that comprises a polynucleotide according to any of claims 28-31.

Claim 31 (withdrawn): A polynucleotide that encodes a compound according to claim 22.

Claim 30 (withdrawn): A polynucleotide that encodes a compound according to claim 18.

Claim 29 (withdrawn): A polynucleotide that encodes a compound according to claim 13.

Claim 28 (withdrawn): A polynucleotide that encodes a compound according to claim 8.

Claim 27 (original): A pharmaceutical composition comprising a compound according to Claim 1 in admixture with a pharmaceutically acceptable carrier thereof.

Claim 26 (withdrawn): The method according to Claim 25, wherein said amount is from 1 µg/kg to 100 mg/kg.

Claim 25 (withdrawn): A method of increasing megakaryocytes or platelets in a patient in need thereof, which comprises administering to said patient an effective amount of a compound according to Claim 1.

and physiologically acceptable salts thereof.

Fc-GGGGG-IEGPTLRQWLARA-GGGGGGGG-IEGPTLRQWLARA

(SEQ. ID NO: 34);

Fc-IEGPTLRQWLARA-GGGGGGGG-IEGPTLRQWLARA

(SEQ. ID NO: 33)

Fc-IEGPTLRQWLARA-GGGGGGGG-IEGPTLRQWLARA

(SEQ. ID NO: 32)

Fc-IEGPTLRQWLARA-GGNGSGG-IEGPTLRQWLARA